



**DEPARTMENT OF FISH AND WILDLIFE**  
**WILDLIFE BRANCH**  
**WILDLIFE INVESTIGATIONS LABORATORY**  
**PESTICIDE INVESTIGATIONS**  
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**Lab Number P-3214**  
**Necropsy Number Z17-0009**  
**CAHFS Number D1705925**

**Date of loss: December 20, 2016**  
**Sample: Raccoon**  
*Procyon lotor*  
**Listing status: No special status**

**To: Tony Linegar**  
**Sonoma County Agricultural Commissioner**

**Report Date: June 30, 2017**

**Remarks**

Loss of raccoon from bromethalin intoxication.

**Background**

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On December 20, 2016, a raccoon was found appearing sick in a residential area of Santa Rosa and brought to Sonoma County Wildlife Rescue. The raccoon stood up but appeared unable to move, would growl but did not resist when handled. The legs were stiff. It was euthanized and submitted to the CDFW Wildlife Investigations Laboratory to determine cause of death.

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**RESULTS OF EXAMINATION**

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The necropsy was performed at the WIL on January 9, 2017. The raccoon was a young adult female in excellent nutritional condition. The coat was in good condition and teeth were white with little sign of wear. A small amount of pinkish mucus was noted in the mouth and trachea. The lungs were edematous (swollen/moist) and mottled. The brain was dark red with blood along the exterior. The digestive tract, from the stomach to the anus, was stained turquoise and a large amount of turquoise-colored material, presumed to be rodenticide, was present throughout (Figures 1 and 2). The turquoise material in the digestive tract was submitted to the California Animal Health and Food Safety Laboratory, Davis, where it was analyzed for desmethylbromethalin, a toxic metabolite of bromethalin. Both bromethalin and anticoagulant rodenticides are often dyed turquoise. Analysis for bromethalin was performed first because it is a neurotoxicant and would cause the observed pre-mortem signs of stiff legs, lack of handling response, and growling. The digestive material tested positive for desmethylbromethalin. Adipose (fat) tissue was subsequently analyzed and also tested positive for desmethylbromethalin.

The cause of death was likely bromethalin intoxication.

Figure 1. Turquoise color of digestive tract of raccoon Z17-0009.

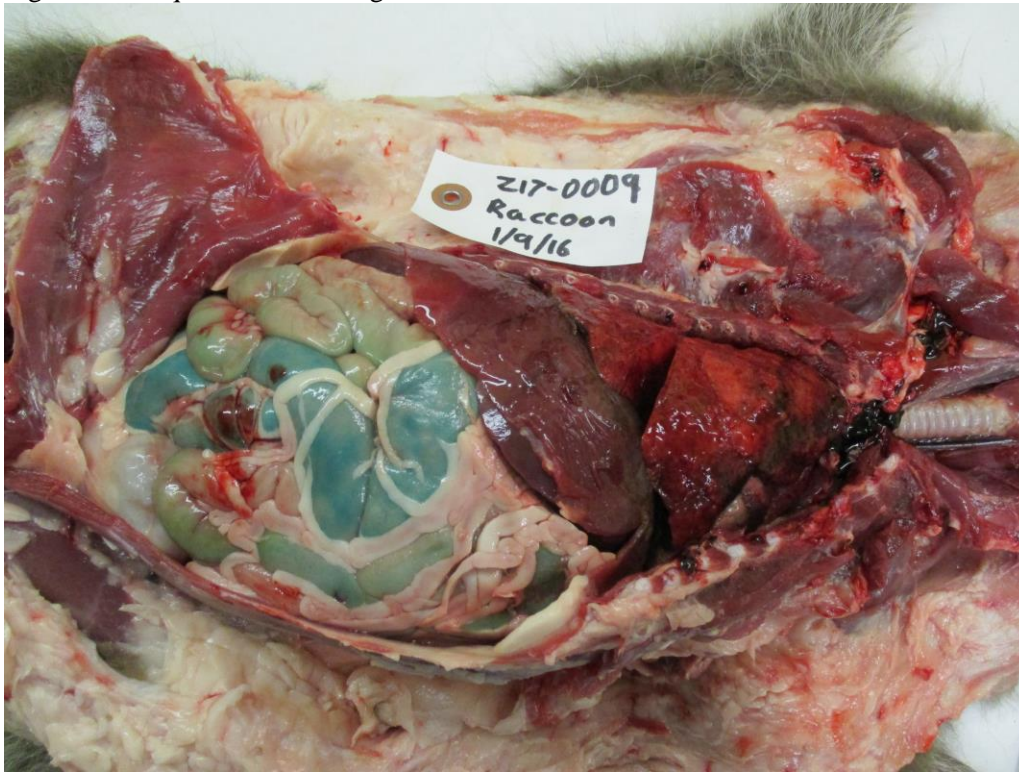


Figure 2. Stomach contents of raccoon Z17-0009 are turquoise-colored.



**WILDLIFE INVESTIGATIONS LABORATORY**



**Stella McMillin, Senior Environmental Scientist  
Wildlife Investigations Laboratory**

**Approved**



**Dr. Deana Clifford, Senior Veterinarian,  
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